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See page 6

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/801,089

DATE: 06/14/2002
TIME: 08:15:06

Input Set : A:\CO5008US.txt
Output Set: N:\CRF3\06142002\I801089.raw

3 <110> APPLICANT: Philips, David
4 Law, Debbie A.
5 Alaimo, Lisa N.
7 <120> TITLE OF INVENTION: Modulation of Integrin-mediated Signal Transduction
9 <130> FILE REFERENCE: 44481-5008-02-US
11 <140> CURRENT APPLICATION NUMBER: US 09/801,089
12 <141> CURRENT FILING DATE: 2001-03-08
14 <150> PRIOR APPLICATION NUMBER: US 08/734,607
15 <151> PRIOR FILING DATE: 1996-10-18
17 <150> PRIOR APPLICATION NUMBER: US 60/005,567
18 <151> PRIOR FILING DATE: 1995-10-18
20 <160> NUMBER OF SEQ ID NOS: 27
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 23
26 <212> TYPE: PRT
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <221> NAME/KEY: MOD_RES
31 <222> LOCATION: (8)
32 <223> OTHER INFORMATION: PHOSPHORYLATION
34 <220> FEATURE:
35 <221> NAME/KEY: MOD_RES
36 <222> LOCATION: (20)
37 <223> OTHER INFORMATION: PHOSPHORYLATION
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Description of Artificial Sequence: Beta 1
41 subunit of integrin
43 <400> SEQUENCE: 1 Asp Thr Gly Glu Asn Pro Ile Tyr Lys Ser Ala Val Thr Thr Val Val
44 5 10 15
45 1
47 Asn Pro Lys Tyr Glu Gly Lys
48 20
51 <210> SEQ ID NO: 2
52 <211> LENGTH: 27
53 <212> TYPE: PRT
54 <213> ORGANISM: Artificial Sequence
56 <220> FEATURE:
57 <223> OTHER INFORMATION: Description of Artificial Sequence: Beta 2
58 subunit of integrin
60 <220> FEATURE:
61 <221> NAME/KEY: MOD_RES
62 <222> LOCATION: (5)

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63 <223> OTHER INFORMATION: PHOSPHORYLATION
65 <400> SEQUENCE: 2
66 Asp Leu Arg Glu Tyr Arg Arg Phe Glu Lys Glu Lys Leu Ser Gln Trp
67 1 5 10 15
68 Asn Asn Asp Asn Pro Leu Phe Lys Ser Ala Thr
69 20 25
70
73 <210> SEQ ID NO: 3
74 <211> LENGTH: 23
75 <212> TYPE: PRT
76 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Description of Artificial Sequence: Beta 3
80 subunit of integrin
82 <220> FEATURE:
83 <221> NAME/KEY: MOD_RES
84 <222> LOCATION: (8)
85 <223> OTHER INFORMATION: PHOSPHORYLATION
87 <220> FEATURE:
88 <221> NAME/KEY: MOD_RES
89 <222> LOCATION: (20)
90 <223> OTHER INFORMATION: PHOSPHORYLATION
92 <400> SEQUENCE: 3
93 Asp Thr Ala Asn Asn Pro Leu Tyr Lys Glu Ala Thr Ser Thr Phe Thr
94 1 5 10 15
95 Asn Ile Thr Tyr Arg Gly Thr
96 20
97
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 33
102 <212> TYPE: PRT
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Description of Artificial Sequence: Beta 5
107 subunit of integrin
109 <220> FEATURE:
110 <221> NAME/KEY: MOD_RES
111 <222> LOCATION: (8)
112 <223> OTHER INFORMATION: PHOSPHORYLATION
114 <220> FEATURE:
115 <221> NAME/KEY: MOD_RES
116 <222> LOCATION: (28)
117 <223> OTHER INFORMATION: PHOSPHORYLATION
119 <400> SEQUENCE: 4
120 Glu Met Ala Ser Asn Pro Leu Tyr Arg Lys Pro Ile Ser Thr His Thr
121 1 5 10 15
122 Val Asp Phe Thr Phe Asn Lys Phe Asn Lys Ser Tyr Asn Gly Thr Val
123 20 25 30
124
126 Asp
130 <210> SEQ ID NO: 5
131 <211> LENGTH: 34

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Input Set : A:\CO5008US.txt
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132 <212> TYPE: PRT
133 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: Description of Artificial Sequence: Beta 6
137 subunit of integrin
139 <220> FEATURE:
140 <221> NAME/KEY: MOD_RES
141 <222> LOCATION: (8)
142 <223> OTHER INFORMATION: PHOSPHORYLATION
144 <220> FEATURE:
145 <221> NAME/KEY: MOD_RES
146 <222> LOCATION: (20)
147 <223> OTHER INFORMATION: PHOSPHORYLATION
149 <400> SEQUENCE: 5
150 Gln Thr Gly Thr Asn Pro Leu Tyr Arg Gly Ser Thr Ser Thr Phe Lys
151 1 5 10 15
152 Asn Val Thr Tyr Lys His Arg Glu Lys Gln Lys Val Asp Leu Ser Thr
153 20 25 30
154
156 Asp Cys
160 <210> SEQ ID NO: 6
161 <211> LENGTH: 23
162 <212> TYPE: PRT
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Description of Artificial Sequence: Beta 6
167 subunit of integrin
169 <220> FEATURE:
170 <221> NAME/KEY: MOD_RES
171 <222> LOCATION: (8)
172 <223> OTHER INFORMATION: PHOSPHORYLATION
174 <220> FEATURE:
175 <221> NAME/KEY: MOD_RES
176 <222> LOCATION: (20)
177 <223> OTHER INFORMATION: PHOSPHORYLATION
179 <400> SEQUENCE: 6
180 Gln Thr Gly Thr Asn Pro Leu Tyr Arg Gly Ser Thr Ser Thr Phe Lys
181 1 5 10 15
182 Asn Val Thr Tyr Lys His Arg
183 20
184
187 <210> SEQ ID NO: 7
188 <211> LENGTH: 29
189 <212> TYPE: PRT
190 <213> ORGANISM: Artificial Sequence
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Description of Artificial Sequence: Beta 7
194 subunit of integrin
196 <220> FEATURE:
197 <221> NAME/KEY: MOD_RES
198 <222> LOCATION: (5)

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/801,089

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Input Set : A:\CO5008US.txt
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199 <223> OTHER INFORMATION: PHOSPHORYLATION
201 <220> FEATURE:
202 <221> NAME/KEY: MOD_RES
203 <222> LOCATION: (25)
204 <223> OTHER INFORMATION: PHOSPHORYLATION
206 <400> SEQUENCE: 7
207 Asp Arg Arg Glu Tyr Ser Arg Phe Glu Lys Glu Gln Gln Leu Asn
208 1 5 10 15
209 Trp Lys Gln Asp Ser Asn Pro Leu Tyr Lys Ser Ala Ile
210 20 25
211
214 <210> SEQ ID NO: 8
215 <211> LENGTH: 4
216 <212> TYPE: PRT
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: Description of Artificial Sequence: ITAM
221 signaling motif in integrin
223 <220> FEATURE:
224 <221> NAME/KEY: misc_feature
225 <222> LOCATION: (2)..(4)
226 <223> OTHER INFORMATION: Xaa at positions 2 and 3 can be any amino acid; Xaa at
227 position 4 is Leu or Ile.
229 <400> SEQUENCE: 8
W--> 230 Tyr Xaa Xaa Xaa
231 1
234 <210> SEQ ID NO: 9
235 <211> LENGTH: 16
236 <212> TYPE: PRT
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Description of Artificial Sequence: Immune
241 receptor activation motif
243 <220> FEATURE:
244 <221> NAME/KEY: misc_feature
245 <222> LOCATION: (2)..(16)
246 <223> OTHER INFORMATION: Xaa at positions 4 and 16 is Leu or Ile; Xaa at
247 positions 2, 3, 5-12, 14 and 15 can be any amino
248 acid.
250 <400> SEQUENCE: 9
W--> 251 Tyr Xaa Tyr Xaa Xaa Xaa
252 1 5 10 15
255 <210> SEQ ID NO: 10
256 <211> LENGTH: 23
257 <212> TYPE: PRT
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: Description of Artificial Sequence: Control
262 peptide for signal protein binding studies
264 <400> SEQUENCE: 10

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/801,089

DATE: 06/14/2002
TIME: 08:15:06

Input Set : A:\CO5008US.txt
Output Set: N:\CRF3\06142002\I801089.raw

265 Asp Thr Ala Asn Asn Pro Leu Tyr Lys Glu Ala Thr Ser Thr Phe Thr
266 1 5 10 15
268 Asn Ile Thr Tyr Arg Gly Thr
269 20
272 <210> SEQ ID NO: 11
273 <211> LENGTH: 23
274 <212> TYPE: PRT
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: Description of Artificial Sequence: Control
peptide for signal protein binding studies
281 <400> SEQUENCE: 11
282 Asp Thr Gly Glu Asn Pro Ile Tyr Lys Ser Ala Val Thr Thr Val Val
283 1 5 10 15
285 Asn Pro Lys Tyr Glu Gly Lys
286 20
289 <210> SEQ ID NO: 12
290 <211> LENGTH: 33
291 <212> TYPE: PRT
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Description of Artificial Sequence: Control
peptide for signal protein binding studies
298 <400> SEQUENCE: 12
299 Glu Met Ala Ser Asn Pro Leu Tyr Arg Lys Pro Ile Ser Thr His Thr
300 1 5 10 15
302 Val Asp Phe Thr Phe Asn Lys Phe Asn Lys Ser Tyr Asn Gly Thr Val
303 20 25 30
305 Asp
309 <210> SEQ ID NO: 13
310 <211> LENGTH: 34
311 <212> TYPE: PRT
312 <213> ORGANISM: Artificial Sequence
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Description of Artificial Sequence: Control
peptide for signal protein binding studies
318 <400> SEQUENCE: 13
319 Gln Thr Gly Thr Asn Pro Leu Tyr Arg Gly Ser Thr Ser Thr Phe Lys
320 1 5 10 15
322 Asn Val Thr Tyr Lys His Arg Glu Lys Gln Lys Val Asp Leu Ser Thr
323 20 25 30
325 Asp Cys
329 <210> SEQ ID NO: 14
330 <211> LENGTH: 27
331 <212> TYPE: PRT
332 <213> ORGANISM: Artificial Sequence
334 <220> FEATURE:
335 <223> OTHER INFORMATION: Description of Artificial Sequence: Control
peptide for signal protein binding studies
336

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/801,089

DATE: 06/14/2002
TIME: 08:15:07

Input Set : A:\CO5008US.txt
Output Set: N:\CRF3\06142002\I801089.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; Xaa Pos. 2,3,4
Seq#:9; Xaa Pos. 2,3,4,5,6,7,8,9,10,11,12,14,15,16
Seq#:22; Xaa Pos. 5,17,19,20,21,23,25,26,27,28,34,36,37,39,40,41,42,43,44
Seq#:22; Xaa Pos. 45,46,47,48,50,51
Seq#:27; Xaa Pos. 3

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/801,089

DATE: 06/14/2002
TIME: 08:15:07

Input Set : A:\C05008US.txt
Output Set: N:\CRF3\06142002\I801089.raw

L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:505 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:16
L:508 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:32
L:511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:48
L:617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0